



**United States Environmental Protection Agency  
Region 9 Laboratory**

**1337 S. 46th Street Building 201  
Richmond, CA 94804**

**Subject: Analytical Testing Results - Project R10S45  
SDG: 10049A**

**From: Brenda Bettencourt, Director  
EPA Region 9 Laboratory  
MTS-2**

**To: Lynda Deschambault  
California Site Cleanup Section 1  
SFD-7-1**

Attached are the results from the analysis of samples from the **GSWC Pioneer 1,2,3 & Dace 1 Influent Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

CC: Tom Perina, CH2M-Hill, Inc.  
Kate Brophy, Golden State Water Co.

Electronic CC: Tom Perina, CH2M-Hill  
Daniel Jablonski, CH2M-Hill  
Kate Brophy, Golden State Water Co.

**Analyses included in this report:**

Semivolatile Organic Compounds by GC/MS



United States Environmental Protection Agency

## Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804

Phone:(510) 412-2300

Fax:(510) 412-2302

**Project Manager:** Lynda Deschambault

**Project Number:** R10S45

**Project:** GSWC Pioneer 1,2,3 & Dace 1 Influent  
Sampling

**California Site Cleanup Section 1**

**75 Hawthorne Street**

**San Francisco CA, 94105**

**SDG:** 10049A

**Reported:** 03/12/10 11:37

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
Y5QZ2	1002017-01	Water	02/17/10 09:40	02/18/10 09:55
Y5QZ3	1002017-02	Water	02/17/10 10:30	02/18/10 09:55
Y5QZ4	1002017-03	Water	02/17/10 11:50	02/18/10 09:55
Y5QZ5	1002017-04	Water	02/17/10 11:59	02/18/10 09:55

**SDG ID** 10049A

**Work Order(s)**

**1002017**



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## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
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**Lab ID:** 1002017-01

**Water - Sampled: 02/17/10 09:40**

**Sample ID:** Y5QZ2

Semivolatile Organic Compounds by EPA Method 8270D									
1,4-Dioxane	1.0	C1, J		2	ug/L	B0B0110	02/18/10	02/24/10	8270D/SOP315
Hexachlorocyclopentadiene	ND	U		5	"	"	"	"	8270D/SOP315
Hexachlorobenzene	ND	U		5	"	"	"	"	8270D/SOP315
Surrogate: 1,4-Dioxane-d8		95 %		20-185%		"	"	"	
Surrogate: 2-Fluorobiphenyl		89 %		26-127%		"	"	"	
Surrogate: Terphenyl-d14		111 %		21-158%		"	"	"	

**Lab ID:** 1002017-02

**Water - Sampled: 02/17/10 10:30**

**Sample ID:** Y5QZ3

Semivolatile Organic Compounds by EPA Method 8270D									
1,4-Dioxane	4.7			1.9	ug/L	B0B0110	02/18/10	02/24/10	8270D/SOP315
Hexachlorocyclopentadiene	ND	U		4.7	"	"	"	"	8270D/SOP315
Hexachlorobenzene	ND	U		4.7	"	"	"	"	8270D/SOP315
Surrogate: 1,4-Dioxane-d8		94 %		20-185%		"	"	"	
Surrogate: 2-Fluorobiphenyl		80 %		26-127%		"	"	"	
Surrogate: Terphenyl-d14		107 %		21-158%		"	"	"	

**Lab ID:** 1002017-03

**Water - Sampled: 02/17/10 11:50**

**Sample ID:** Y5QZ4

Semivolatile Organic Compounds by EPA Method 8270D									
1,4-Dioxane	3.8			2	ug/L	B0B0110	02/18/10	02/24/10	8270D/SOP315
Hexachlorocyclopentadiene	ND	U		5	"	"	"	"	8270D/SOP315
Hexachlorobenzene	ND	U		5	"	"	"	"	8270D/SOP315
Surrogate: 1,4-Dioxane-d8		89 %		20-185%		"	"	"	
Surrogate: 2-Fluorobiphenyl		79 %		26-127%		"	"	"	
Surrogate: Terphenyl-d14		107 %		21-158%		"	"	"	

**Lab ID:** 1002017-04

**Water - Sampled: 02/17/10 11:59**

**Sample ID:** Y5QZ5

Semivolatile Organic Compounds by EPA Method 8270D									
1,4-Dioxane	3.6			2	ug/L	B0B0110	02/18/10	02/24/10	8270D/SOP315
Hexachlorocyclopentadiene	ND	U		5	"	"	"	"	8270D/SOP315
Hexachlorobenzene	ND	U		5	"	"	"	"	8270D/SOP315
Surrogate: 1,4-Dioxane-d8		100 %		20-185%		"	"	"	
Surrogate: 2-Fluorobiphenyl		84 %		26-127%		"	"	"	
Surrogate: Terphenyl-d14		114 %		21-158%		"	"	"	



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Sampling

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## Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B0B0110 - 3520B CLLE - SVOCs**

**Prepared: 02/18/10 Analyzed: 02/24/10**

**Semivolatile Organic Compounds by EPA Method 8270D - Quality Control**

### Blank (B0B0110-BLK1)

1,4-Dioxane	ND	U		1 ug/L						
Hexachlorocyclopentadiene	ND	U		5 "						
Hexachlorobenzene	ND	U		1 "						

Surrogate: 1,4-Dioxane-d8	4.38			"	5.00		88	20-185		
Surrogate: 2-Fluorophenol	41.2			"	50.0		82	27-115		
Surrogate: Phenol-d5	41.5			"	50.0		83	20-129		
Surrogate: 2-Chlorophenol-d4	42.1			"	50.0		84	25-120		
Surrogate: 1,2-Dichlorobenzene-d4	34.5			"	50.0		69	20-123		
Surrogate: Nitrobenzene-d5	38.7			"	50.0		77	20-144		
Surrogate: 2-Fluorobiphenyl	39.4			"	50.0		79	26-127		
Surrogate: 2,4,6-Tribromophenol	39.9			"	50.0		80	20-159		
Surrogate: Terphenyl-d14	52.5			"	50.0		105	21-158		

### LCS (B0B0110-BS1)

1,4-Dioxane	35.1			1 ug/L	40.0		88	64-144		
Hexachlorocyclopentadiene	12.8			5 "	40.0		32	20-110		
Hexachlorobenzene	37.3			1 "	40.0		93	54-120		

Surrogate: 1,4-Dioxane-d8	4.38			"	5.00		88	20-185		
Surrogate: 2-Fluorobiphenyl	42.3			"	50.0		85	26-127		
Surrogate: Terphenyl-d14	48.0			"	50.0		96	21-158		

### Matrix Spike (B0B0110-MS1)

**Source: 1002017-01**

1,4-Dioxane	34.6			1 ug/L	38.1	1.03	88	71-131		
Hexachlorocyclopentadiene	14.3			5 "	38.1	ND	37	20-110		
Hexachlorobenzene	37.1			1 "	38.1	ND	97	62-122		

Surrogate: 1,4-Dioxane-d8	4.14			"	4.77		87	20-185		
Surrogate: 2-Fluorobiphenyl	41.4			"	47.7		87	26-127		
Surrogate: Terphenyl-d14	47.9			"	47.7		101	21-158		

### Matrix Spike Dup (B0B0110-MSD1)

**Source: 1002017-01**

1,4-Dioxane	32.7			0.9 ug/L	37.9	1.03	84	71-131	6	20
Hexachlorocyclopentadiene	14.6			4.7 "	37.9	ND	39	20-110	3	20
Hexachlorobenzene	36.3			0.9 "	37.9	ND	96	62-122	2	20

Surrogate: 1,4-Dioxane-d8	4.33			"	4.74		91	20-185		
Surrogate: 2-Fluorobiphenyl	41.7			"	47.4		88	26-127		
Surrogate: Terphenyl-d14	49.0			"	47.4		104	21-158		



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**Qualifiers and Comments**

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.